

PATENT CLAIMS

1. A method for manufacturing a reaction rod for use in connecting a chassis (21) of a vehicle with a wheel axle housing (22) of the vehicle, where the reaction rod comprises
- a rod-shaped central portion or rod (1) with two end portions, each with its first connecting portion (31,32),
 - two housings (2,3), each with its second connecting portion (33,34), which can be rigidly connected with the respective, first connecting portions (31,32), and each housing (2,3) has a through-going passage (4,5), and
 - two attachment pieces (8,9), each of which extends through its passage (4,5), and which on use of the reaction rod can be attached to the chassis (21) and the wheel axle housing (22) respectively,
 - where the distance between reference points (16,17) of the respective attachment pieces (8,9) establishes a functional length (F) of the reaction rod,
 - where the rod (1) and the housings (2,3) are initially assembled without being permanently interconnected, and the attachment pieces (8,9) are inserted in the respective housings (2,3),
- characterised by the following steps;
- mounting the rod (1) and the attachment pieces (8,9) in a jig (50) with a positioning device (52-60) thereby securing the attachment pieces (8,9), the distance between the reference points (16,19) corresponding to the functional length (F), and
 - attaching the housings (2,3) to the rod (1).
2. A method according to claim 1,
- characterised by inserting a heat-insulating lining (41) in the passages (4,5) between the housings (2,3) and the attachment pieces (8,9), and attaching the lining rigidly thereto.
3. A method according to claim 1 or 2,
- characterised by providing the attachment pieces (8,9) and the respective passages (4,5) and possibly the first and second connecting portions (31,32) with a relative clearance that is such as to permit a relative angular displacement of these components in order to achieve a correct relative position of the components, and subsequently to fill the clearance with a fixing means in order to secure the components in this position.
4. A method according to one of the preceding claims,
- characterised by manufacturing the housings (8,9) by stamping, bending and possibly pressing of a plate-shaped material.

5. A reaction rod for use in connecting a chassis (21) of a vehicle with a wheel axle housing (22) of the vehicle, where the reaction rod comprises

- a rod-shaped central portion or rod (1) with two end portions, each with its first connecting portion (31,32),
- two housings (2,3), which have been fabricated separately from the rod (1), each with its second connecting portion (33,34), and which are rigidly connected with the respective, first connecting portions (31,32), and each housing (2,3) has a through-going passage (4,5),

characterised in that the housings are manufactured by stamping and bending of a plate-shaped material.

6. A reaction rod according to claim 5, characterised in that each housing is provided as a C-shaped hoop, the second connecting portion (33) comprising two halves (33a,33b) extending with a relative clearance (33c).

7. A jig for manufacturing a reaction rod for use in connecting a chassis (21) of a vehicle with a wheel axle housing (22) of the vehicle, where the reaction rod comprises

- a rod-shaped central portion or rod (1) with two end portions, each with its first connecting portion (31,32),
- two housings (2,3), each with its second connecting portion (33,34), which can be rigidly connected with the respective, first connecting portions (31,32), and each housing (2,3) has a through-going passage (4,5), and
- two attachment pieces (8,9), each of which extends through its passage (4,5), and has attachment lugs (14,15), which on use of the reaction rod can be attached to the chassis (21) and the wheel axle housing (22) respectively,
- where the distance between reference points (16,17) of the respective attachment lugs (14,15) establishes a functional length (F) of the reaction rod,
- where the rod (1) and the housings (2,3) are initially assembled without being permanently interconnected, and the attachment pieces (8,9) are inserted in the respective housings (2,3),

characterised in that the jig (50) comprises a bottom (51) on which is mounted with an intermediate space a positioning device (52-55) for securing the respective attachment lugs (14,15), whereby the reference points (16,17) are kept at a relative distance corresponding to the functional length (F), and the rod (1) and the housings (2,3) can be attached to each other while thus secured.

8. A method for manufacturing a reaction rod for use in connecting a chassis (21) of a vehicle with a wheel axle housing (22) of the vehicle, where the reaction rod comprises

- a rod-shaped central portion or rod (1) with two end portions, each with its first connecting portion (31,32),

- two housings (2,3), each with its second connecting portion (33,34), which can be rigidly connected with the respective, first connecting portions (31,32), and each housing (2,3) has a through-going passage (4,5) with a first longitudinal axis (L1) extending through a central point of the passage's cross section, and
- 5 - two attachment pieces (8,9), each of which extends through its passage (4,5), and which on use of the reaction rod can be attached to the chassis (21) and the wheel axle housing (22) respectively, where the attachment pieces (8,9) have a second longitudinal axis (L2) extending through a centre point of the attachment pieces' cross section,
- 10 - where the distance between the reference points (16,17) of the respective attachment pieces (8,9) establishes a functional length (F) of the reaction rod,
- where the rod (1) and the housings (2,3) are initially assembled without being permanently interconnected,
- characterised by the following steps;
- 15 - establishing the contour of each attachment piece (8,9) in the direction of the second longitudinal axis (L2),
- analysing the contour of the attachment piece (8,9) and establishing the location of the centre point of the contour,
- calculating the distance between the attachment piece's (8,9) reference point
- 20 (16,17) and centre point, considered in the direction of the attachment piece (8,9) which coincides with the finished reaction rod's longitudinal direction,
- mounting the rod (1) with the housings (2,3) in a jig with two insertion pieces, whose cross section is adapted to the cross section of the passages, and each of which has third longitudinal axes (L3), extending through the centre point of the
- 25 respective insertion pieces' cross section, the insertion pieces being inserted in the respective passages,
- adjusting the distance between the third longitudinal axes (L3) of the insertion pieces in the housings in such a manner that the distance between the third longitudinal axes (L3) corresponds to the distance between the second longitudinal
- 30 axes (L2) when the reference points are at a relative distance corresponding to the functional length (F),
- connecting the housings with the rod, and
- inserting the attachment pieces in the respective passages.